

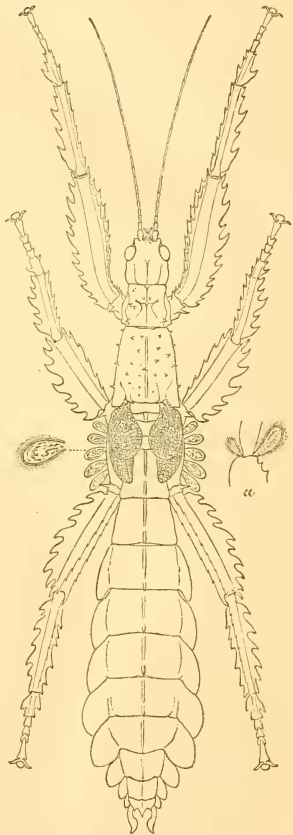
LIX.—*Observations on the supposed Semiaquatic Phasmid, Cotylosoma dipneusticum, W.-M.* By CHARLES O. WATERHOUSE.

IN the 'Annals' for 1878 (i. p. 101) the late Mr. Wood-Mason called attention to a species of Phasmidæ in the British Museum, to which he gave the name *Cotylosoma dipneusticum*, and which he suggests may be "modified for an aquatic life; for it breathes not only in the ordinary fashion amongst insects by means of tracheæ opening by stigmata on the exterior of the body, but also by the structures known as tracheal gills," &c.

Dr. David Sharp having recently asked me questions about this insect, I think it well to figure it and to call attention to the following facts:—

1. So far as I am aware, nothing is known of the habits of this species. It may or may not be aquatic.

2. The specimen is a dried one, and I think Wood-Mason in the sentence above quoted assumes too much. There is nothing in the form of the lateral plates of the metathorax to show definitely that they are "tracheal gills," although I would not, on the other hand, say that they are not. I notice, however, that an allied Brazilian insect—*Prisopus phacellus*—has very similar plates, one on each side of the insertion of the anterior tibia. For the



Cotylosoma dipneusticum.
a. Knee-joint of *Prisopus phacellus*.

supposed aquatic habits of *Prisopus* see Ann. & Mag. Nat. Hist. 1866, xviii. p. 265.

3. In the 'Zoologist' for 1860, p. 7141, MacGillivray described an insect from Aneiteum, New Hebrides, under the name of *Prisopus Carlottæ*. There is an insect in the Museum bearing this name from Aneiteum, which appears to be correctly named, but it has five lamelliform plates at the sides of the metathorax, as in *Cotylosoma*; the posterior one, however, is not visible from above, so that MacGillivray may have overlooked this when he gave the number as four. *Cotylosoma* is evidently very closely allied to MacGillivray's insect, which ought not to be placed in the American genus *Prisopus*.

4. *Cotylosoma* is from Taviuni, Fiji Islands; not Borneo, as stated in Wood-Mason's remarks.

It is not my purpose to characterize *Cotylosoma dipneusticum*; in fact it scarcely needs more than the figure.

LX.—Notes, Morphological and Systematic, on the Madreporarian Genus *Turbinaria*. By H. M. BERNARD, M.A. Cantab., F.L.S., F.Z.S.

[Plates XIX. & XX.]

HAVING been engaged for the last eight months in studying and arranging the Turbinarians in the Natural History Museum, I propose to give a short abstract of some of the more interesting results obtained.

The task has been one of very great difficulty, and I am deeply indebted to the constant consideration and sympathetic advice accorded to me during my work by Dr. Günther, F.R.S., to whose kindness I owe my access to the specimens in the collection; without such encouragement I should hardly have had the fortitude to proceed, in face of the apparent impossibility of ever being able to arrive at a satisfactory system of classification. The nature of some of these difficulties I propose now to describe. I take this opportunity also of thanking Prof. Jeffrey Bell, who has the more immediate charge of the corals in the National Collection, for much assistance, advice, and friendly criticism, which has often been of great value to me.

Without going into the history of the genus, I may briefly say that the Turbinarians, according to the classification of Milne-Edwards in 'Les Coralliaires' (which classification